

REMARKS

Favorable reconsideration and allowance of the present application is respectfully requested.

As stated in the Office Action, a Restriction Requirement was placed on the pending claims. Applicants provisionally elected to prosecute the invention of Group I, corresponding to claims 1-23. Affirmation of the provisional election is hereby made. Thus, claims 1-16 and 18-23, including independent claims 1 and 18, are pending in the present application. Independent claim 1, for instance, is directed to a composite vapor barrier for use between one or more spaces defined by the structural elements of a building. The composite vapor barrier comprises a first facing layer formed from a material that is generally impermeable to water vapor, wherein at least one surface of the first facing layer is applied with an adhesive coating, and a scrim thermally bonded to the first facing layer. As a result, the composite vapor barrier does not substantially rupture when a bag of sand having a weight of approximately 400 pounds and a diameter of approximately 30 inches is dropped onto the vapor barrier from a distance of about 42 inches above an upper surface thereof.

In the Office Action, independent claims 1 and 18 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,094,883 to Atkins in view of U.S. Patent No. 5,540,971 to Daurer, et al. Atkins describes a barrier that includes first and second layers of vinyl and metallized polyester with fiberglass scrim or mesh bonded therebetween (e.g., Lamtech Model VRP-5503). However, as correctly noted by the Examiner, Atkins fails to disclose various aspects of the present claims.

Nevertheless, Daurer, et al. was combined with Atkins in an attempt to render obvious the limitations of claims 1 and 18. Daurer, et al. describes a roofing material 10 that basically consists of a substrate 12 and a polyvinyl film or coatings 14 and 16. (Col 1, ll. 38-47, Fig. 3). The construction of the substrate 12 is commonly referred to as a triaxial scrim fabric made on a tridirectional scrim machine with 1500 denier fill yarn wound around a 1000 denier selvage yarn. (Col 1, ll. 48-62). However, the combination of Daurer, et al. with Atkins still fails to disclose various features of independent claims 1 and 18.

For example, claims 1 and 18 require that the composite vapor barrier does not substantially rupture when a bag of sand having a weight of approximately 400 pounds and a diameter of approximately 30 inches is dropped onto the vapor barrier from a distance of about 42 inches above an upper surface thereof. Despite the lack of any teaching in Daurer, et al. or Atkins relating to this limitation, it was nonetheless suggested in the Office Action that this limitation is inherent, or at the very least obvious, from the combination of Daurer, et al. and Atkins.

To establish inherency, the evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference(s), and that it would be so recognized by persons of ordinary skill in the art. Inherency may not be established by probabilities or possibilities. Thus, an inherency rejection may not be based on what would result due to the optimization of conditions, but only on what was necessarily present in the prior art. In the Office Action, it was stated that the claimed property of claims 1 and 18 was "presumed" inherent because the combination of Daurer, et al. and Atkins used "like materials", i.e., a metallized film, a triaxial polyester

scrim, and a vinyl film. However, Applicants respectfully submit that an inherency rejection is not proper in this case because it is based only on the optimization of a wide variety of possible conditions and parameters.

The ability to withstand the dropping of a bag of sand having a weight of approximately 400 pounds and a diameter of approximately 30 inches from a distance of about 42 inches is not simply dependent on the presence of "like materials", as suggested in the Office Action. Instead, a multitude of different features of the composite vapor barrier may be altered to influence its strength. For instance, the manner in which the scrim is bonded to other layers of the composite vapor barrier has an effect on the overall strength of the composite vapor barrier. As an example, thermal bonding and/or the application of pressure may enhance the strength of the barrier. In addition, with respect to the facing layer, the basis weight, etc., may also influence the resulting strength of the composite vapor barrier. Further, with respect to the scrim, its basis weight, size of the threads, spacing of the threads, etc., may all influence the resulting strength of the composite vapor barrier.

Thus, just from the exemplary features referenced above, at least 6 different properties other than the types of materials used could be altered to affect the ability of the composite vapor barrier to withstand the dropping of a bag of sand having a weight of approximately 400 pounds and a diameter of approximately 30 inches from a distance of about 42 inches. As correctly noted by the Examiner, many of these features that ultimately affect the strength of the composite vapor barrier of claims 1 and 18 are not disclosed in Daurer, et al. or Atkins. It is evident that the above-referenced

limitation cannot be necessarily present from the combined teachings of Daurer, et al. and Atkins, and thus, is not inherent in these references.

Besides the above-discussed limitation, the combination of Daurer, et al. and Atkins also fails to disclose other limitations of independent claims 1 and 18. For instance, Daurer, et al. and Atkins fail to disclose that the scrim is "thermally bonded" to a facing layer (e.g., barrier layer). Such thermal bonding may increase the strength of the overall composite structure. Thus, for at least the reasons set forth above, Applicants respectfully submit that, even if combined, Daurer, et al. and Atkins fail to disclose various limitations of independent claims 1 and 18.

Moreover, Applicants also note that no motivation would have existed for one of ordinary skill in the art to combine the above-cited references in the manner suggested in the Office Action. Atkins describes a barrier formed of vinyl, metallized film, and a fiberglass scrim or mesh. The barrier of Atkins protects from moisture accumulation and is said to have good bursting strength. The roofing material of Daurer, et al., on the other hand, is not mentioned as a suitable material for use in protecting insulation from moisture accumulation, i.e., as a vapor barrier. There is simply no indication that one of ordinary skill in the art would have found it obvious to incorporate the scrim of Daurer, et al. as part of a vapor barrier. Instead, the rationale for combining the references in the manner suggested in the Office Action appears to be that it would have been "obvious to try" such a material in the barrier of Atkins, which is improper under 35 U.S.C. §103(a). Thus, for at least the reasons set forth above, Applicants respectfully submit that independent claims 1 and 18 patentably define over Daurer, et al. or Atkins, taken singularly or in any proper combination.

In addition, the above-cited references were also cited to reject dependent claims 2-16 and 19-23. Applicants respectfully submit, however, that at least for the reasons indicated above relating to corresponding independent claims 1 and 18, claims 2-16 and 19-23 patentably define over the references cited. However, Applicants also note that the patentability of dependent claims 2-16 and 19-23 certainly does not hinge on the patentability of independent claims 1 and 18. In particular, it is believed that the some or all of these claims may possess features that are independently patentable, regardless of the patentability of claims 1 and 18.

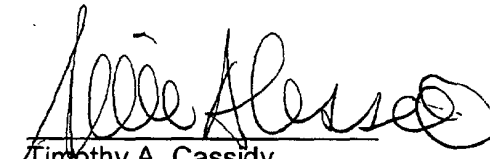
In summary, Applicants respectfully submit that the present claims patentably define over all of the prior art of record for at least the reasons set forth above. As such, it is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Ruddock is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this response.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Appl. No. 10/023,487
Amdt. Dated July 22, 2003
Reply to Office Action of Apr. 24, 2003

Respectfully requested,

DORITY & MANNING, P.A.

A handwritten signature in black ink, appearing to read "Timothy A. Cassidy", written over a horizontal line.

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